AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-3. (Canceled)

4. (Previously presented) A semiconductor device, comprising:

a semiconductor substrate;

a low dielectric constant film constituted essentially of a ladder-type hydrogen siloxane provided on said semiconductor substrate wherein said ladder-type hydrogen siloxane has a refractive index not less than 1.38 but not greater than 1.40 at a wavelength of 633 nm;

a protection film provided on said low dielectric constant film; and

a metal interconnect formed in said low dielectric constant film and said protective film.

5. (Previously presented) A semiconductor device, comprising:

a semiconductor substrate;

a low dielectric constant film constituted essentially of a ladder-type hydrogen siloxane provided on said semiconductor substrate wherein said ladder-type hydrogen siloxane has a density not less than 1.50g/cm^3 but not greater than 1.58g/cm^3;

a protection film provided on said low dielectric constant film; and

a metal interconnect formed in said low dielectric constant film and said protective film.

6. (Currently amended) ~~The semiconductor device as recited in Claim 1,~~

A semiconductor device, comprising:

a semiconductor substrate;

a low dielectric constant film consisting essentially of a ladder-type hydrogen siloxane provided on said semiconductor substrate;

a protection film consisting essentially of a silicon oxide film provided on said low dielectric constant film; and

a metal interconnect formed in said low dielectric constant film and said protective film;

wherein a plurality of said metal interconnects is provided so as to form an isolated region where one of said plurality of metal interconnects is separately located and a concentrated region where the other metal interconnects are closely disposed to one another.

7. (Previously presented) A semiconductor device, comprising:

a semiconductor substrate;

a low dielectric constant film constituted essentially of a ladder-type hydrogen siloxane provided on said semiconductor substrate;

a protection film provided on said low dielectric constant film; and

a plurality of metal interconnects formed in said low dielectric constant film and said protective film wherein said plurality of metal interconnects is provided so as to form an isolated region where one of said plurality of metal interconnects is separately located and a concentrated region where the other metal interconnects are closely disposed to one another, and

wherein said plurality of metal interconnects in the concentrated region is disposed such that an interval between substantially parallel portions of neighboring metal interconnects is not greater than a double of a width of the respective metal interconnects.

8. (Previously presented) A semiconductor device, comprising:

a semiconductor substrate;

a low dielectric constant film constituted essentially of a ladder-type hydrogen siloxane provided on said semiconductor substrate;

a protection film provided on said low dielectric constant film wherein said protection film is formed such that a film thickness thereof at its thickest portion is in a range of 10% to 30% of a film thickness of said low dielectric constant film at its thickest portion; and

a metal interconnect formed in said low dielectric constant film and said protective film.

Claims 9-10 (canceled).

11. (Currently amended) ~~The semiconductor device as recited in Claim 1,~~

A semiconductor device, comprising:

a semiconductor substrate;

a low dielectric constant film consisting essentially of a ladder-type hydrogen siloxane provided on said semiconductor substrate;

a protection film consisting essentially of a silicon oxide film provided on said low dielectric constant film; and

a metal interconnect formed in said low dielectric constant film and said protective film;

wherein said ladder-type hydrogen siloxane has a refractive index not less than 1.38 but not greater than 1.40 at a wavelength of 633 nm.

12. (Currently amended) ~~The semiconductor device as recited in Claim 1,~~

A semiconductor substrate;

a low dielectric constant film consisting essentially of a ladder-type hydrogen siloxane provided on said semiconductor substrate;

a protection film consisting essentially of a silicon oxide film provided on said low dielectric constant film; and

a metal interconnect formed in said low dielectric constant film and said protective film;

wherein said ladder-type hydrogen siloxane has a density not less than 1.50g/cm^3 but not greater than 1.58g/cm^3.

13. (Currently amended) ~~The semiconductor device as recited in Claim 6,~~

A semiconductor substrate;

a low dielectric constant film consisting essentially of a ladder-type hydrogen siloxane provided on said semiconductor substrate;

a protection film consisting essentially of a silicon oxide film provided on said low dielectric constant film; and

a metal interconnect formed in said low dielectric constant film and said protective film;

wherein a plurality of said metal interconnects is provided so as to form an isolated region where one of said plurality of metal interconnects is separately located and a concentrated region where the other metal interconnects are closely disposed to one another; and

said plurality of metal interconnects in the concentrated region is disposed such that an interval between substantially parallel portions of neighboring metal interconnects is not greater than a double of a width of the respective metal interconnects.

14. (Currently amended) ~~The semiconductor device as recited in Claim 1,~~

A semiconductor substrate;

a low dielectric constant film consisting essentially of a ladder-type hydrogen siloxane provided on said semiconductor substrate;

a protection film consisting essentially of a silicon oxide film provided on said low dielectric constant film; and

a metal interconnect formed in said low dielectric constant film and said protective film;

wherein said protection film is formed such that a film thickness thereof at its thickest portion is in a range of 10% to 30% of a film thickness of said low dielectric constant film at its thickest portion.